

PATENT CLAIMS

1. Said voltage converter (SCW) for converting a said primary/secondary voltage (U_p/U_s) into a said secondary/primary voltage (U_s/U_p), comprising at least one said controlled switch (S_p, S_s), wherein a said control circuit (AST) controls, according to its supplied set points, the at least one said controlled switch (S_p, S_s) with a variable pulse duty factor and/or variable control times and/or variable frequency,
5 **characterized in that**
a said digital signal processor (DSP) for the running calculation of the set points is provided for the said control circuit (AST), and
- 10 the said voltage converter (SCW) comprises a said (bus) interface (BSS), via which said operating parameters (ppm) can be transmitted to the said digital signal processor (DSP) and can be preset from a said external control center (ELS).
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2. Said voltage converter (SCW) in accordance with claim 1, **characterized in that** the said (bus) interface (BSS) is bidirectional and said operating data (V_p, U_s, I_s) of the converter can be transmitted via the said bus interface at the said external control center (ELS).
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3. Voltage converter in accordance with claim 2, **characterized in that** a said memory (SPE) is provided for the storage of operating data, which can be read out via the said (bus) interface (BSS).
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4. Voltage converter in accordance with claim 2 or 3, **characterized in that** a said real time clock (RTC) is provided in order to correlate operating data with time values.

5. Voltage converter in accordance with one of the claims 2 through 4, **characterized in that** a said auxiliary energy memory (HES) is provided for the permanent energy supply of the said digital signal processor (DSP) and/or of the said real time clock (RTC).
- 5 6. Voltage converter in accordance with claim 5, **characterized in that** the said auxiliary energy memory (HES) is reloaded in the presence of primary voltage (Up) and/or secondary voltage (Us).